MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Bolton Conductive Systems

Michigan Manufacturing Technology Center

Bolton Conductive Systems gets a Charge out of Lean Implementation

Client Profile:

Bolton Conductive Systems LLC (BCS) is an electrical system supplier that designs and manufactures a wide variety of electrical solutions for the military, automotive, marine and specialty vehicle markets. Located in Commerce Township, Michigan, BCS is recognized throughout the electronics industry as a leading manufacturer of wire harnesses, panels, electronic modules and complete electrical systems. The company employs 110 people.

Situation:

BCS management attended a series of seminars on Lean Implementation co-sponsored by the Michigan Manufacturers Association (MMA) and the Michigan Manufacturing Technology Center (MMTC), a NIST MEP network affiliate. A follow-up meeting between MMTC and BCS staff resulted in a grant award through the state-sponsored From Surviving to Thriving (FSTT) program to assist in improvements. As part of the grant, BCS submitted data and received a Performance Benchmarking Report that helped identify key areas of improvement.

Solution:

MMTC initially provided Lean Executive training for BCS management staff. With continued assistance from MMTC, BCS developed an 18-month transformation plan with specific objectives to improve delivery, freight, and inventory turns while reducing scrap with. BCS kicked off its transformation efforts with a Kaizen focused on aggressively eliminating waste. BCS formed a Kaizen team and utilized Value Stream Mapping (VSM) to identify specific improvement areas. Together with MMTC specialists, BCS applied Production Planning Process (3P) tools and deployed the future state for the harness assembly line. As a result of MMTC's assistance, BCS is now equipped with the knowledge and Lean tools necessary to apply to other product families in the business. The initial Kaizen experience helped equip BCS with the knowledge and lean tools necessary to apply to other product families in the business.

As a result of MMTC's assistance, BCS increased productivity, reduced lead-time, improved response rate to customers, and increased inventory turnover. Additional layout improvements from the 3P process resulted in better quality, fewer defects, and an increased capacity on its existing footprint helped position BCS to compete with low-cost competitors and invest in new markets. Fueled by their successes with Lean implementation, BCS management began looking at diversifying their product lines to fill its newfound capacity. MMTC's Market Diversification program was a great fit to assist BCS in expanding beyond automotive to the medical, fitness, alternative energy, and military markets. BCS began by compiling a customer database to help understand the true cost of doing business. MMTC helped BCS management to create a profile of a desired customer, based on size of company, industry, order volumes, etc., so that BCS could solicit bids and quote jobs. This, coupled with an increase in visibility at trade shows, targeted email marketing campaigns, and a redesigned website program, helped catapult BCS to quote over \$30 million in jobs in one month. According to Bill Bolton,



MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

BCS president and owner, "After almost a year of transition, our efforts are starting to payoff. Our key to success has been our intense focus on market diversification."

Results:

- * Increased sales by \$30 million.
- * Increased productivity by 45 percent.
- * Reduced lead-time by 20 days.
- * Improved customer satisfaction.
- * Increased visibility at trade shows.

Testimonial:

"Being a part of the Kaizen initiative, I was very impressed observing firsthand the result of the MMTC Lean Champion training."

John Doran, Director, Quality and Continuous Improvement

